

Religious Contrasts in Consumer Decision Behaviour Patterns: Their Dimensions and Marketing Implications

Nejdet Delener

St John's University, New York, USA

Introduction

Religion, being an aspect of culture, has considerable influence on people's values, habits and attitudes, and it greatly influences lifestyle, which in turn affects consumer decision behaviour[e.g. 1-3]. As Peterson and Roy[4] comment, one function of religion is to provide a source of meaning and purpose for people. Religion can provide a framework which makes life understandable and interpretable. Although religion has been a significant force in the lives of many individuals, its role in consumer choice can be characterized as unclear or "fuzzy". First, religion serves to define the ways to do things (i.e. established practice) and to provide a series of tools and techniques for social behaviour[5-8]. Second, religion either fosters or frowns on particular choice behaviour[9,10]. Thus, despite the potential importance of the religion or religiosity constructs, any empirical investigation of these constructs in consumer behaviour has been rare.

More generally, the religions practised in a society influence husband/wife decision-making roles, as well as societal institutions and customs. It has been suggested that religious orientation is a strong influence on the development of family commitment in giving the family a sense of purpose and values oriented to the need and welfare of others[e.g. 11,12]. Commitment, in the causal sequence, is assumed to influence family time and effort. Religious devoutness indirectly influences commitment by directly affecting relationship qualities (i.e. love/caring), *locus* of control and gender roles which in turn directly influence commitment[11].

Little empirical information is available on the relationship between family values and religion. Most of the literature on families and religion falls into one of four categories:

- (1) Studies of the effects religious beliefs and involvements have on family-related behaviours – divorce, sexual behaviour, and the like[e.g. 13,14].
- (2) Studies of the effects religious beliefs and involvements have on attitudes about gender roles, sexuality, family life[e.g. 15-17].
- (3) Studies of the transmission of religious allegiance through families[e.g. 18,19].

(4) Studies of religious intermarriage[e.g. 6,20].

All these studies have examined the relationship between religious variables and attitudes/behaviours from sociological and psychological points of view. Less attention has been paid to the relationship between religiosity and consumer purchase decisions. Furthermore, no multidimensional study which investigated the religious dimension and orientation that correlate with purchasing roles had ever been reported. This research is, therefore, designed to explore the relationships between religiosity and consumer-related marital roles in the process of automobile purchase decision making.

The remainder of the article is organized into four sections. The next section, background, presents major propositions and the research findings relating religiosity and family decision roles. This is followed by a paradigm showing relationships among religion, religiosity and household consumer decision-making patterns. The third section, methodology, describes the data collection and measurement procedures. The article concludes with a discussion of the results obtained from testing the hypotheses and their implications.

Conceptual Background

The primary goal of this study is to explore the hypothesized differences in consumer-related marital roles of Catholic, Jewish, pro-religious and non-religious households; therefore this review will focus on relevant available literature. While Catholic families are frequently labelled patriarchal in structure, there have been few empirical studies in which the family has been the primary focus. Several sociologists have reported that the depiction of Catholic families often focuses on a rigid and authoritarian structure by a macho male[21-23]. As Borowski[24] characterizes Catholicism, a sub-culture is a way of life. It is derived from and maintained by abiding family ties. It influences self-identity and fundamental values. However, in contrast with Catholic families, the Jewish family structure seems to be more democratic and can best be termed "family-centred". Thus in Jewish households decisions seem to be made jointly[e.g. 25-27].

Most studies of religion relevant to family-related behaviours have been conducted within the fields of sociology, anthropology and psychology. For example, Bahr[28] studied the denominational differences in marital role definitions and role enactment among Catholics, Protestants and Mormons. In Bahr's study, three areas of role behaviour were examined:

- (1) role performance (the actual divisions of role tasks in the respondent's own family);
- (2) family power (the division of decision making);
- (3) family conflict (degree of inter-spousal disagreement over selected roles).

Results suggest that, in child socialization roles, Catholics were more likely than the other religious groups to state that both spouses were equally responsible for teaching and disciplining children. A degree of male dominance in the

settling of family disputes was apparent among all religious groups. About half the Catholic respondents stated that the husband exerted more influence than the wife in resolving recent family conflicts; the findings did not show any evidence of unusual matriarchal dominance in Catholic families. However, comparing research from Mexico, Puerto Rico, England and the USA, Rainwater[29] found that Catholic males from all areas suffer from job insecurity and compensate for their feelings of inferiority by exaggerating their masculinity and subordinating women. This might suggest that machismo may be due to feelings of inferiority, which men try to hide by acting superiorly[30]. This is accomplished by avoiding feminine and emphasizing strong masculine traits.

Brinkerhoff and MacKie[15] also studied gender behaviours such as familial power and division of household labour of Catholics, Mormons and Protestants. Findings suggest that, in terms of familial power, Mormons are among the most egalitarian. However, Roman Catholics appeared far more egalitarian than other studies reported[e.g. 22]. Their findings showing Roman Catholics to be egalitarian are consistent with Meir[31] and Campbell[32]. The most traditional group appeared to be Protestants.

The only study reported in marketing literature includes Delener and Schiffman's study[33] which examined the role structure of Catholic and Jewish households. Their findings suggest that in Catholic households husbands were the major influence in making specific purchase decisions. In contrast, in Jewish households husbands and wives shared equally in making most decisions. Although the relationship between religion/religiosity and decision making has not been extensively investigated, it is clear that marketing researchers are increasingly paying attention to the religiosity construct. For example, Engel[34] studied the psychographic profiles of two different denominations in Brazil. Other researchers examined the influence of religious background on consumption innovativeness[35,36], purchase risk aversion[1] and selected retail store patronage behaviour[37,38].

The limited available research suggests that religiosity, as a segmentation variable, has been recognized as one of the most important cultural forces and a key influence in buyer behaviour. Therefore studying the influence of the religious construct on consumer decision making is important owing to its stability over time and the observable nature of many of its elements.

Religious Influence/Role Structure Paradigm

A simple paradigm (Figure 1) shows the religious variables as they were hypothesized in the study to influence consumer-related marital roles in purchase decision making. Religiousness, as an important value in the individual consumer's cognitive structure, can influence an individual's behaviour. Furthermore, religiousness may play a significant general role in the problem-solving and decision-making processes[e.g. 39-41]. For example, Pargament[42] has noted that religion may serve important functions in helping people understand and cope with life events by offering guidance, support and

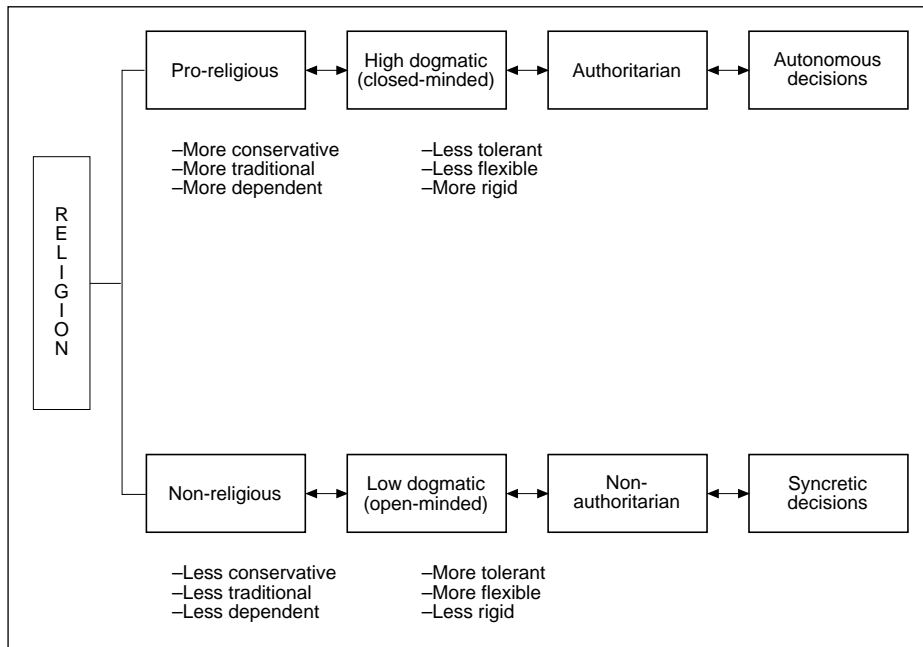


Figure 1. Religious Influences and Role Structure Paradigm

hope. Spilka *et al.*[43] see religion as providing a frame of reference for individuals to help them understand, predict and control events, and to maintain self-esteem. Wilson[44] concludes “religion is probably the single most important shaper of sex roles”. People’s ideas about gender, both role and attitude, derive from socialization which occurs within the family setting, and has traditionally been guided by religious norms[e.g. 45,46]. Still further, McMurry[22, p. 83] considers religion and family as reactive institutions which exert conservative influences and concludes, “the subjects who are exposed to more of this influence through greater religious involvement should be more traditional”.

More specifically, religion represents a potentially significant element in many, if not all, the problem-solving and decision-making phases. For example, as recent research in religious attribution theory suggests, religion may affect how one understands the meaning of many problems[47,48]. Similarly, religious beliefs and practices may guide the individual in the process of selecting solutions to problems. Religion may also provide the individual with emotional support throughout the problem-solving and decision-making processes, particularly during stressful periods[42]. Research hypotheses are discussed next.

Research Hypotheses: Religion and Decision Behaviour Patterns

From various kinds of data, there is considerable evidence that a generally consistent positive correlation exists between religious conservatism and

authoritarianism[e.g. 49-51]. In examining this relationship, some theorists contend that because of the organized structure of religion and its place in childbearing, religious systems foster authoritarian persons[52]. Others, however, argue that, given certain personality dispositions, certain religious content is usually more congenial[53]. In any event, particular religious beliefs seem to fit more easily into authoritarian patterns, and the cognitive structure of authoritarianism seems to be more congenial with particular types of religion[49,54].

Adorno *et al.*[55] assumed authoritarianism to be a syndrome that would make a person very susceptible to anti-democratic movements. Authoritarianism consists of nine traits: conventionalism, power orientation, submission, aggression, anti-intracception (i.e. rejection of self-reflection), superstition, cynicism, projectivity and excessive fixation on sexuality[e.g. 56]. These traits point to the psychoanalytic perspective of Adorno and his colleagues, who tried to explain the development of the authoritarian personality by describing its typical family background. An authoritarian person would have been raised in a family with a dominant, status-oriented father and a very restrictive mother. In this family, every tendency towards disobedience would have been strongly suppressed; therefore a premature and complete identification, also with submission to the powerful parents, would follow.

Some researchers have ventured the interpretation, as suggested by Adorno *et al.*[55], that the personality characteristic of dogmatism is the common basis of the correlation between conservative attitudes and religion. Studies have found that religiousness appears to occur most frequently in rather well-defined religious groups, those which are conservative in dogma[e.g. 57,58]. Greeley[59] reasoned that, if differences in conservative attitudes between Catholics and Jews were attributable to religious influences, conservatism (traditionalism and dogmatism) should be greater among those who could be regarded as more religious with their tradition.

The existing literature collectively suggests considerable evidence of a high degree of authoritarianism and conservatism among Catholics. Vosburgh and Juliani[60], for example, reported that Catholics had more conservative views than those in other religious groupings. Findings of another study suggested that a group of Catholic students scored relatively high on the Authoritarian Scale (*F*-Scale) as well as on the dogmatism, opinionation and ethnocentrism scales[61]. Similarly, studies by Warshay *et al.*[62] reported higher authoritarian scores for Catholic samples. Jones[39], in a study of naval aviation cadets, also found that those scoring high on the Authoritarian Scale were more likely to be Roman Catholic than Jewish. Hence the following research hypotheses were developed and tested in the present study:

- H1a. The roles of husbands and wives in Catholic, Jewish, pro-religious and non-religious households vary over the course of consumer decision-making processes.

H1b. Catholic households are prone to husband-dominated decision making.

H1c. Jewish households are prone to syncretic consumer decision making.

Religiosity and Decision Behaviour Patterns

From a biblical perspective, pressure for obedience to an authority must always be assessed in the light of the effects such obedience would have on the persons involved. Religious believers have often placed primary emphasis on obedience and have relegated man's responsibility for the protection of his partner to a position clearly secondary[63-65]. For instance, within the religious structure children have been taught to obey authority unquestioningly; they have not been taught to assess critically the legitimacy of the authority's demands. Thus individuals who are deeply embedded in this structure would be expected to obey authority to the exclusion of other values. The ability to make firm decisions has perhaps become part of their lifestyle. Thus those who are strongly committed to religion are both attitudinally and behaviourally capable of making decisions consistent with moral conscience[41,63,66,67]. At the same time, non-religious extremists can become committed to an authoritarian structure of their own. They may find themselves caught in the web of excessive submission to the authority of their own value structure.

Religious moderates have their values more in balance; while they recognize the importance of obedience to authority, they evaluate that authority in the light of their concern for other men. Religious moderates may be unaccustomed to firm decision making. There are also the agnostics – those who “do not know for sure”. In the presence of such indecision, they are willing to have the momentary decisions of life made for them. In the Bock and Warren[63] study, these less decisive individuals were compelled to surrender moral conscience to a seemingly knowledgeable and decisive person. Only those accustomed to independent decision making could resist. The biblical position is that the man who is undecided about basic religious issues is unable to be decisive when confronted by an ethical dilemma. His tendency is to forfeit his choice to any impinging power. On the other hand, having taken a definite religious stance, one will act in accordance with his conscience.

Research indicates that pro-religious individuals are likely to be more dogmatic[61,68,69], more conservative[62,70], and more authoritarian[52-54] than are the non-religious subjects. In particular, Frenkel-Brunswick[52] cites the authoritarian's tendency to rigid, exaggerated sex-role stereotypes that stress clearly defined roles of dominance and submission in husband/wife and general male/female relationships. Dichotomous sex-role conceptions within the authoritarian family emphasize exaggerated masculine and feminine characteristics[e.g. 71-73]. Johnson *et al.*[74] found that authoritarian subjects from entrepreneurial backgrounds were more restrictive than non-authoritarians in the number of behaviours they considered appropriate for children of both sexes. As authoritarianism is positively correlated with

religiosity, it is therefore predicted that individuals with pro-religious orientations are more likely to make autonomous decisions. The profile of the autonomous decision mode suggests a family with traditional values and attitudes towards marital roles. The power to make a decision is influenced by prescribed authority[e.g. 33,75,76]. This leads to the following research hypotheses within the context of the consumer purchase decision process:

- H2a.* For Catholic and Jewish households, the higher the religious orientation, the greater the occurrence of autonomous consumer decisions.
- H2b.* For Catholic and Jewish households, the lower the religious orientation, the greater the occurrence of syncretic consumer decisions.
- H3a.* For Catholic and Jewish households, the higher the perceived religious affiliation, the greater the occurrence of autonomous consumer decisions.
- H3b.* For Catholic and Jewish households, the lower the perceived religious affiliation, the greater the occurrence of syncretic consumer decisions.

Methodology: Data Collection Procedures and Sample

Data were collected from up-scale Catholic and Jewish households residing in the North-East region of the USA who had purchased a new automobile within the past year. The typical respondent was between 35 and 44 years of age, had at least some college education, and came from a nuclear family. A comparatively up-scale sample was selected because, first, the overall objective of this research is not to measure absolute occurrences in the society, but rather to explore relationships existing between variables and, second, up-scale samples may even be desirable in this type of research. As was pointed out by Hirschman[36], a study using religion as an independent variable is perhaps better served by surveying the more up-scale consumer, since doing so allows better control for socio-economic differences known to exist among religious groups. The systematic sample was used as a selection procedure in this research and the sampling frame containing 1,500 households was obtained from a well-established list supply company.

A letter describing the study and ensuring respondents' anonymity in any published results was mailed to every second household on the list. A total of 750 questionnaires were then hand-delivered (and later collected) by the 24 trained screening interviewers. After discarding unusable questionnaires owing to severe omissions and end-piling, 207 (131 Catholics and 76 Jews) of the collected questionnaires were included in the database, yielding a response rate of 28 per cent. The somewhat low response rate may perhaps be attributed to the length of the questionnaire. Furthermore, members of any other religious groups (primarily Protestants) were excluded because the research was to focus on perceived differences in the consumer-related marital roles of the largest minority religious groups in the USA.

Measurement of Study Variables

To measure influence and marital role orientation, principal decision-makers were asked to recall the manner in which various consumer decisions had been made in these households. For each automobile sub-decisions and decisions in general, each spouse indicated the degree of his/her perceived influence based on a five-point scale. The decision components represented eight common and relevant dimensions of purchase, e.g. problem/need recognition, search for information, what make, what model, what colour, when, where to buy and how much to spend. An automobile was selected as a household decision-making object because it met the selection criteria of other products in previous household decision studies[e.g. 33,76], that is it requires substantial financial outlay, has an extended period of ownership and is shared by several household members. In measuring the effect of religious factors on family purchasing roles, three independent variables were used. These variables and their operational definitions are presented in Table I.

Reliability Testing

In this study Cronbach's[77] popular unidimensional coefficient alpha was used to test reliability. It is an estimate of the correlation between random samples of items from a universe of items and is an appropriate index of equivalence. This measurement, in effect, produces the mean of all possible split-half coefficients resulting from different splittings of the measurement instrument[78]. Internal consistency reliabilities (coefficient alphas) of the religiousness and purchase decision scales were 0.84 and 0.89 respectively. Based on Nunnally's criteria it is important to note that the scales' reliabilities are very large in magnitude. This indicates a high degree of internal consistency. According to Nunnally[79]:

What a satisfactory level of reliability is depends on how a measure is being used. In the early stages of research on predictor tests or hypothesized measures of a construct, one saves time and energy by working with instruments that have only modest reliability, for which purpose reliabilities of 0.60 or 0.50 will suffice (p. 226).

Measuring reliability this way is appropriate for buyer behaviour research and has been used by several researchers [e.g. 35,80].

Analysis and Findings

Multivariate analysis of covariance (MANCOVA) was used to test research hypotheses. The following discussion will explore these statistical analyses.

As indicated in Table II, religious orientation effect and religion by religious orientation interaction were significant in determining marital roles in automobile purchase decisions. For the religious orientation, MANCOVA findings were significant for questions concerning search for information, when to purchase, where to purchase and what model to purchase. As is indicated in Table V, the pro-religious households search for information jointly (2.8737) more than non-religious households (2.1696). Non-religious households decided jointly when to purchase automobiles (2.6429) more than pro-religious

Table I.
Variables and Their
Operational Definitions

Variable	Operational definition	How measured?
Purchasing roles	A five-point scale measure of the decision-maker's influence in the decision process.	We are interested in the roles played by various family members in deciding about your most recently purchased automobile (please circle one answer from each item). (1) Which family members stimulated interest in buying your newest automobile? 1 2 3 4 5 (2) Which family members obtained most of the information on your recently purchased automobile? 1 2 3 4 5 (3) Which family members most influenced when the automobile was purchased? 1 2 3 4 5 (4) Which family members most influenced where you bought your most recently purchased automobile? 1 2 3 4 5 (5) Which family members most influenced what make of automobile was purchased? 1 2 3 4 5 (6) Which family members most influenced what model of automobile was purchased? 1 2 3 4 5 (7) Which family members most influenced what colour of automobile was purchased? 1 2 3 4 5 (8) Which family members most influenced how much money was spent on the automobile? 1 2 3 4 5 Key: 1 = Husband only 2 = Husband more than wife 3 = Husband and wife equally 4 = Wife more than husband 5 = Wife only
Religion	Religious affiliation of the decision-maker; measured on a six-category scale.	With what religion or denomination, if any, do you identify? Please indicate which one. Catholic _____ Islam _____ Jewish _____ Other (please specify) _____ Protestant _____ None _____ Only those respondents indicating that they were Catholic or Jewish (reformed and conservative only) were included in the analysis.

(Continued)

Religious orientation	A level of religious involvement of the decision-maker; measured on a five-point scale.	<p>Allport and Ross[82] 20-item intrinsic-extrinsic measure of religious orientation was administered to all participants. The instrument is composed of 20 statements, 11 expressing extrinsic involvement and nine expressing intrinsic. Consistent with common practice, statements are reacted to on a five-point scale, with 4 and 5 indicating an extrinsic orientation, 1 and 2 indicating an intrinsic orientation, and 3 being assigned to any items omitted by a respondent. Then, depending on their tendency to agree or disagree with the two types of statements, they can be assigned to one of four classifications:</p> <ol style="list-style-type: none"> (1) Pro-religious: Subjects above the median on both scales. (2) Intrinsic: Subjects above the intrinsic median but below the extrinsic median. (3) Extrinsic: Subjects above the extrinsic median but below the intrinsic median. (4) Non-religious: Subjects below the median on both scales. <p>In studies by Allport and Ross[82], Morris et al.[83], Batson and Flory[84] and others (e.g. Baker and Gorsuch[85]; Batson and Ventis[86]; and Masters[87]) the Intrinsic-Extrinsic Scale appears to demonstrate its construct validity consistently.</p> <p>While this classification scheme has been followed by many researchers, literature suggests that many intrinsic and pro-religious individuals are generally indistinguishable and that they both score higher than either the extrinsic or non-religious. Therefore, in examining the role of religiousness in purchase decisions pro-religious and non-religious groups were isolated as the focus of current research.</p>							
Perceived strength of religious affiliation	A self-report measure of the decision-maker's ability to judge his/her perceived strength of religious affiliation measured on a five-point scale.	<p>How would you rate the strength of your religious affiliation?</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 0 10px;">Very strong</td> <td style="padding: 0 10px;">5</td> <td style="padding: 0 10px;">4</td> <td style="padding: 0 10px;">3</td> <td style="padding: 0 10px;">2</td> <td style="padding: 0 10px;">1</td> <td style="padding: 0 10px;">Very weak</td> </tr> </table>	Very strong	5	4	3	2	1	Very weak
Very strong	5	4	3	2	1	Very weak			

Table I.

households (2.3263). Furthermore, the non-religious households decided jointly where to purchase the automobile (2.5000) compared with pro-religious households where husbands were the dominant influence in deciding where to purchase an automobile (2.1684). A similar pattern was also found with regard to the questions concerning what model automobile to purchase. The non-religious households were more likely to decide jointly what model automobile to purchase (2.7321).

Furthermore, the findings suggest that religion by religious orientation interact for the questions concerning where and what colour automobile to purchase. Within the context of the non-religious orientation, Jewish households were more likely to decide jointly where to purchase an automobile (3.0370) compared with Catholic households which tended to be husband-dominated (2.3294). In contrast, for the pro-religious orientation, Catholic households were more likely to decide jointly where to purchase an automobile (2.3913) compared with Jewish households which were more likely to be husband-dominated (1.9592). The findings also suggest an interaction between religion and religious orientation for the decision of what colour automobile to purchase. For those with non-religious orientation, Jewish households were more likely to decide jointly what colour automobile to purchase (3.1481) than Catholic households where wives were the dominant influence in deciding the colour of the automobile (3.4353). Furthermore, for those with pro-religious

Table II.
Marital Roles in
Automobile Purchase
Decisions

Effect	Hotelling	<i>F</i>	<i>DF</i>	Significance
Religion	0.074	1.812	8,195	0.077
Religious orientation	0.144	3.518	8,195	0.001
Religion by religious orientation	0.134	3.259	8,195	0.002
Perceived strength of religious affiliation	0.038	0.925	8,195	0.497

Table III.
Religious Orientation
on Marital Roles in
Automobile Purchase
Decisions

Marital roles	<i>F</i>	Significance
Obtained information	5.923	0.016
Influenced when to purchase	5.737	0.018
Influenced where to purchase	16.903	0.000
Influenced what model to purchase	4.793	0.030

Table IV.
Religion by Religious
Orientation Interaction
on Marital Roles in
Automobile Purchase
Decisions

Marital roles	<i>F</i>	Significance
Influenced where to purchase	10.201	0.002
Influenced what colour to purchase	7.958	0.005

Marital roles	Religion	Non-religious	Religious orientation Pro-religious	Total mean for religion
1. Stimulated interest in automobile	Catholic	2.6589	2.8043	2.7099
	Jewish	2.6667	2.5510	2.5921
		2.6607	2.6737	2.6667
2. Obtained information	Catholic	2.1177†	2.0435	2.0916
	Jewish	2.3333	1.7143	1.9342
		2.1696*	2.8737	2.0338
3. Influenced when to purchase	Catholic	2.5529	2.4130	2.5038
	Jewish	2.9259	2.2450	2.4868
		2.6429*	2.3263	2.4976
4. Influenced where to purchase	Catholic	2.3294††	2.3913	2.3511
	Jewish	3.0370	1.9592	2.3421
		2.5000**	2.1684	2.3478
5. Influenced what make to purchase	Catholic	2.6235	2.5000	2.5802
	Jewish	2.6296	2.3265	2.4342
		2.6250	2.4105	2.5266
6. Influenced what model to purchase	Catholic	2.6706†	2.4565	2.5954
	Jewish	2.9259	2.3265	2.5395
		2.7321*	2.3895	2.5749
7. Influenced what colour to purchase	Catholic	3.4353††	2.8696	3.2366
	Jewish	3.1481	3.4898	3.3684
		3.3661	3.1895	3.2850
8. Influenced how much money spent	Catholic	2.4823	2.1739	2.3740
	Jewish	2.6296	2.3469	2.4474
		2.5179	2.2632	2.4010
Key:	Significant main effect			
	* $p < 0.05$			
	** $p < 0.01$			
	Significant interaction			
	† $p < 0.05$			
	†† $p < 0.01$			

Table V.
Mean Scores on Marital
Roles in Automobile
Purchase Decisions

orientation, Catholic households were more likely to decide jointly what colour automobile to purchase (2.8696) compared with Jewish households where wives were the dominant influence in deciding the colour of the automobile (3.4898).

Discussion and Implications

Findings of this study, as expected, suggest that differential role behaviour varies according to religious influences, and, on balance, provide support for

Sheth's[3] theory of family buying decisions. Furthermore, findings of this research add to the understanding of fundamental consumer behaviour processes. Engel *et al.*[81] noted in their summary of the literature that differential role behaviour varies according to socio-cultural influences, type of product and decision stages. Clearly, the stage in the decision process has been shown to be an important element in role structure. Findings suggest that role structure varies over the course of the automobile purchase decision-making process owing to the respondents' religious affiliation and religious orientation. Hence, *H1a* is supported. For example, in pro-religious Jewish households and pro-religious households in general, husbands exerted more influence in deciding where to purchase an automobile. This is consistent with McMurry's[22] conclusion that stated the more religiously involved would portray more traditional gender attitudes.

Results did not show any significant religion and perceived strength of religious affiliation influences on role structure. Hence, *H1b, c* and *H3a, b* are not supported. However, the analysis demonstrates significant findings for the religious orientation and decision behaviour patterns. For example, in pro-religious Catholic households, husbands and wives jointly decided where to purchase and what colour of automobile to purchase, whereas, in pro-religious Jewish households, husbands and wives decided when to purchase, and what colour of automobile to purchase respectively. These results, taken together, provide partial support for *H2a*. In contrast, in non-religious Jewish households, husbands and wives decided jointly where to purchase and what colour of automobile to purchase. Therefore the evidence in Table V provides support for *H2b*.

Results of this study suggest that marketers should seek a niche within a given market. Marketing should not be seen as a quick-fix solution for current problems, but rather entailing sensitivity in meeting the needs and wants of the consumers served. Specifically, in advertising, promotion, direct sales, etc., the importance of the decision-maker's religiousness must be considered. If his/her role in the decision-making process is ignored or treated as unimportant the sale of that product or service may be lost.

In general, marketing and consumer behaviour researchers have been concerned with the relative influence of husbands and wives in various decisions because of the implications role differentiation may have for product planning, advertising content and media, and choice of distribution channels. Specifically, enhanced knowledge of religious differences in consumption decision processes should have significant impact on the effectiveness of global marketing strategies and tactics. In particular, for promotion strategies, the appropriate communications target should be more clearly identifiable. Also such knowledge should serve as a guide to development of more suitable message content and appeals. This knowledge may also have implications for distribution and product variables. In this way, marketing strategists can more effectively encounter the needs of diverse religious groups.

While these findings are interesting and yield potentially valuable implications, one should recognize the inherent limitations associated with generalizing these findings beyond the sample utilized, its geographic scope, and the product category examined. Future investigations should therefore attempt to go beyond this basic conceptualization and methodology. They should investigate a number of product and service categories. In addition, there is great need for expansion of the religions investigated. Other issues that need to be studied include purchase timing and variations in product and service evaluative criteria among household members. Furthermore, with global marketing increasing in importance it will be desirable to explore the implications of religiousness on marketing ethics, politics and the economic marketing systems. Additional buyer behaviour studies to examine religion further as a background variable influencing hedonic consumption changes in consumer values would be a contribution.

References

1. Delener, N., "The Effects of Religious Factors on Perceived Risk in Durable Goods Purchase Decisions", *The Journal of Consumer Marketing*, Vol. 7, Summer 1990, pp. 27-38.
2. Hirschman, E.C., "Religious Affiliation and Consumption Processes: A Preliminary Paradigm", in Sheth, J. (Ed.), *Research in Marketing*, Vol. 6, JAI Press, Chicago, IL, 1982, pp. 131-70.
3. Sheth, J.N., "A Theory of Family Buying Decisions", in Sheth, J.N. (Ed.), *Models of Buyer Behaviour: Conceptual, and Empirical*, Harper & Row, New York, NY, 1974, pp. 17-33.
4. Peterson, L.R. and Roy, A., "Religiosity, Anxiety, and Meaning and Purpose: Religion's Consequences for Psychological Wellbeing", *Review of Religious Research*, Vol. 27, 1985, pp. 49-62.
5. Bossard, J.H.S. and Boll, E.S., *Ritual in Family Living*, University of Pennsylvania Press, Philadelphia, PA, 1950.
6. Dudley, M.G. and Kosinski, F.A. Jr, "Religiosity and Marital Satisfaction: A Research Note", *Review of Religious Research*, Vol. 32, September 1990, pp. 78-86.
7. Engel, J.F. and Blackwell, R.D., *Consumer Behaviour*, 4th edition, Dryden Press, Chicago, IL, 1982.
8. Schwab, R. and Petersen, K.U., "Religiousness: Its Relation to Loneliness, Neuroticism and Subjective Wellbeing", *Journal for the Scientific Study of Religion*, Vol. 29, 1980, pp. 335-45.
9. Hawkins, D.J., Coney, K.A. and Best, R.J., *Consumer Behaviour: Implications for Marketing Strategy*, Business Publications, Dallas, TX, 1980.
10. Schiffman, L.G. and Kanuk, L.L., *Consumer Behaviour*, 4th edition, Prentice-Hall, Englewood Cliffs, New Jersey, NJ, 1991.
11. Larson, L.E. and Goltz, J.W., "Religious Participation and Marital Commitment", *Review of Religious Research*, Vol. 30, June 1989, pp. 387-99.
12. Scanzoni, J. and Arnett, C., "Enlarging the Understanding of Marital Commitment via Religious Devoutness, Gender-role Preferences, and Locus of Control", *Journal of Family Issues*, Vol. 8, 1987, pp. 135-56.
13. Glenn, N.P. and Shelton, B.A., "Pre-Adult Background Variables and Divorce: A Note of Caution about Over-reliance on Explained Variance", *Journal of Marriage and the Family*, Vol. 45, 1983, pp. 405-10.
14. Watson, P.J., Folbrecht, J., Morris, R. and Hood, R.W. Jr, "Values, 'Irrationality' and Religiosity", *Journal of Psychology and Theology*, Vol. 18, 1990, pp. 348-62.

15. Brinkerhoff, M.B. and Mackie, M.M., "Religious Denominations Impact upon Gender Attitudes: Some Methodological Implications", *Review of Religious Research*, Vol. 25, June 1984, pp. 365-78.
16. Hartman, M. and Hartman, H., "Sex-Role Attitudes of Mormons vs. Non-Mormons in Utah", *Journal of Marriage and the Family*, Vol. 45, 1983, pp. 897-902.
17. Wilcox, C., "Religion and Politics among White Evangelicals: The Impact of Religious Variables on Political Attitudes", *Review of Religious Research*, Vol. 32, September 1990, pp. 27-42.
18. Hoge, D.R., Petrillo, G.H. and Smith, E.I., "Transmission of Religious and Social Values from Parents to Teenage Children", *Journal of Marriage and the Family*, Vol. 44, 1982, pp. 569-80.
19. Richards, P.S., "The Relationship between Conservative Religious Ideology and Principled Moral Reasoning: A Review", *Review of Religious Research*, Vol. 32, June 1991, pp. 359-68.
20. Johnson, R.A., *Religious Assortative Marriage in the United States*, Academic Press, New York, NY, 1980.
21. Alvarez, D. and Bean, F.D., "The Mexican-American Family", in Mindel, C.H. and Habenstein, R.W. (Eds), *Ethnic Families in America*, Elsevier, New York, NY, 1976, pp. 432-43.
22. McMurry, M., "Religion and Women's Sex Role Traditionalism", *Sociological Forces*, Vol. 11, 1978, pp. 81-95.
23. Ramirez, M., *Psychology of Americans: Mestizo Perspectives on Personality and Mental Health*, Pergamon Press, New York, NY, 1983.
24. Borowski, K.H., "Religion and Politics in Post-World War II Poland", in Hadden, J.K. and Shupe, A. (Eds), *Prophetic Religions and Politics*, Paragon House, New York, NY, 1986.
25. Gordon, A., *Jews in Suburbia*, Beacon Press, Boston, MA, 1959.
26. Loudon, D.L. and Bitta, A.J.D., *Consumer Behaviour: Concepts and Applications*, McGraw-Hill, New York, NY, 1979.
27. Stodtbeck, F.L., "Jewish and Italian Immigration and Subsequent Status Mobility", in McClelland, D.C. (Ed.), *Talent and Society*, Van Nostrand, Princeton, NJ, 1958.
28. Bahr, H.M., "Religious Contrasts in Family Role Definitions and Performance: Utah Mormons, Catholics, Protestants, and Others", *Journal for the Scientific Study of Religion*, Vol. 21, 1982, pp. 200-17.
29. Rainwater, L., "Marital Sexuality in Four Cultures of Poverty", *Journal of Marriage and the Family*, Vol. 4, 1964, pp. 457-66.
30. Ingoldsby, B.B., "The Latin-American Family: Familism vs. Machismo", *Journal of Comparative Family Studies*, Vol. 22, Spring 1991, pp. 57-62.
31. Meir, H.C., "Mother-Centredness and College Youths' Attitudes towards Social Equality for Women: Some Empirical Findings", *Journal of Marriage and Family*, Vol. 34, February 1972, pp. 115-21.
32. Campbell, D.F., "Religion and Values among Nova Scotia Students", *Sociological Analysis*, Vol. 27, Summer 1966, pp. 80-93.
33. Delener, N. and Schiffman, L.G., "Family Decision Making: The Impact of Religious Factors", in Frazier, G., Ingene, C., Aaker, D., Ghosh, A., Kinnear, T., Levy, S., Staelin, R. and Summers, J. (Eds), *Efficiency and Effectiveness in Marketing*, American Marketing Association, 1988, pp. 80-83.
34. Engel, J.F., "Psychographic Research in a Cross-cultural Non-product Setting", *Advances in Consumer Research*, Vol. 3, 1976, pp. 98-101.
35. Delener, N., "An Examination of the Religious Influences as Predictors of Consumer Innovativeness", *Journal of Midwest Marketing*, Vol. 5, Spring 1990, pp. 167-78.

36. Hirschman, E.C., "Religious Differences in Cognitions regarding Novelty Seeking and Information Transfer", in Mitchell, A.A. (Ed.), *Advances in Consumer Research*, Vol. 10, Association for Consumer Research, St Louis, MO, 1982, pp. 228-33.
37. Clark, J.W., "Personal Religiousness and Retail Store Evaluative Criteria", in King, R.L. (Ed.), *Marketing: Perspectives for the 1990s*, Southern Marketing Association, New Orleans, LA, November 1993, pp. 102-05.
38. Wilkes, R.E., Burnett, J.J. and Howell, R.D., "On the Meaning of Religiosity in Consumer Research", *Journal of the Academy of Marketing Science*, Vol. 14, Spring 1986, pp. 47-56.
39. Jones, M.B., "Religious Values and Authoritarian Tendency", *Journal of Social Psychology*, Vol. 48, 1958, pp. 83-9.
40. Kaiser, D.L., "Religious Problem-solving Styles and Guilt", *Journal for the Scientific Study of Religion*, Vol. 30, 1991, pp. 94-8.
41. Pargament, K.I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J. and Jones, W., "Religion and the Problem-solving Process; Three Styles of Coping", *Journal for the Scientific Study of Religion*, Vol. 27, 1988, pp. 90-104.
42. Pargament, K.I. and Hahn, J., "God and the Just World: Causal and Coping Attributions in Health Situations", *Journal for the Scientific Study of Religion*, Vol. 25, 1986, pp. 193-207.
43. Spilka, B., Shaver, P. and Kirkpatrick, L., "A General Attribution Theory for the Psychology of Religion", *Journal for the Scientific Study of Religion*, Vol. 24, 1985, pp. 1-20.
44. Wilson, J., *Religions in American Society*, Prentice-Hall, Englewood Cliffs, New Jersey, NJ, 1978.
45. D'Antonio, W.V., "Family and Religion", *Journal for the Scientific Study of Religion*, Vol. 19, 1980, pp. 89-104.
46. Lampe, P.E., "Androgyny and Religiosity", *International Journal of Women's Studies*, Vol. 4, 1981, pp. 24-34.
47. Gorsuch, R.L. and Smith, C.S., "Attributions of Responsibility to God: An Interaction of Religious Beliefs and Outcomes", *Journal for the Scientific Study of Religion*, Vol. 22, 1983, pp. 340-52.
48. Spilka, B. and Schmidt, G., "General Attribution Theory for the Psychology of Religion: The Influence of Event-Character on Attributions to God", *Journal for the Scientific Study of Religion*, Vol. 22, 1983, pp. 326-40.
49. Lupfer, M.B., Hopkinson, P.L. and Kelley, P., "An Exploration of the Attributional Styles of Christian Fundamentalists and of Authoritarians", *Journal for the Scientific Study of Religion*, Vol. 27, 1988, pp. 389-98.
50. Putney, S. and Middletown, R., "Dimensions and Correlates of Religious Ideologies", *Social Forces*, Vol. 39, 1961, pp. 285-90.
51. Stanley, G., "Personality and Attitude Correlates of Religious Conversion", *Journal for the Scientific Study of Religion*, Vol. 4, 1974, pp. 60-63.
52. Frenkel-Brunswick, E., "Further Exploration by a Contributor to 'The Authoritarian Personality'", in Christie, R. and Jahoda, M. (Eds), *Studies in the Scope and Method of the Authoritarian Personality*, Free Press, Glencoe, IL, 1954, pp. 226-75.
53. Photiadis, J. and Biggar, J., "Dimensions and Correlates of Religious Ideologies", *Social Forces*, Vol. 39, 1961, pp. 285-90.
54. Shils, E.A., "Authoritarianism: Right Left", in Christie, R. and Jahoda, M. (Eds), *Studies in the Scope and Method of 'The Authoritarian Personality'*, The Free Press, Glencoe, IL, 1954, pp. 24-9.
55. Adorno, T.W., Frenkel-Brunswick, E., Levinson, D.J. and Sanford, R.N., *The Authoritarian Personality*, W.W. Norton & Co., New York, NY, London, 1982.
56. Van Ijzendoorn, M.H., "Moral Judgement, Authoritarianism and Ethnocentrism", *The Journal of Social Psychology*, Vol. 129, 1990, pp. 37-45.

57. Demerath, N.J. III, *Social Class in American Protestantism*, Rand McNally, Chicago, IL, 1965.
58. Ragsdale, D.J. and Durham, K.R., "Audience Response to Religious Fear Appeals", *Review of Religious Research*, Vol. 28, September 1986, pp. 40-50.
59. Greeley, A.M., "A Note on the Origins of Religious Differences", *Journal for the Scientific Study of Religion*, Vol. 3, 1963, pp. 21-31.
60. Vosburgh, M.G. and Juliani, R.N., "Contrasts in Ethnic Family Patterns: The Irish and the Italians", *Journal of Comparative Family Studies*, Vol. 21, Summer 1990, pp. 269-84.
61. Rokeach, M., *The Open and Closed Mind*, Basic Books, New York, NY, 1960.
62. Warshay, L., Goldman, M. and Biddle, E., "Anomie and F Scores as Related to Social Characteristics", *Journal of Social Psychology*, Vol. 62, 1964, pp. 117-23.
63. Bock, D.C. and Warren, N.C., "Religious Belief as a Factor in Obedience to Destructive Commands", *Review of Religious Research*, Vol. 13, 1972, pp. 185-91.
64. Hart, A.D., *Coping with Depression in the Ministry and Other Helping Professions*, Word Books, Waco, 1984.
65. Welch, M.R., Tittle, C.R. and Petee, T., "Religion and Deviance among Adult Catholics: A Test of the 'Moral Communities' Hypothesis", *Journal for the Scientific Study of Religion*, Vol. 30, 1991, pp. 159-72.
66. Elms, A.C. and Milgram, S., "Personality Characteristics Associated with Obedience and Defiance toward Authoritative Commands", *Journal of Experimental Research in Personality*, Vol. 1, 1966, pp. 282-9.
67. Lazarus, R. and Folkman, S., *Stress, Appraisal and Coping*, Springer Publishing Company, New York, NY, 1984.
68. Rokeach, M., "Value Systems in Religion", *Review of Religious Research*, Vol. 11, 1969, pp. 3-23.
69. Rokeach, M., *Understanding Human Values: Individual and Societal*, Free Press, New York, NY, 1979.
70. Donahue, M.J., "Intrinsic and Extrinsic Religiousness: Review and Meta-Analysis", *Journal of Personality and Social Psychology*, Vol. 48, 1985, pp. 400-19.
71. Finke, R., "Demographics of Religious Participation: An Ecological Approach, 1850-1980", *Journal for the Scientific Study of Religion*, Vol. 28, 1989, pp. 45-58.
72. Siiter, R. and Ellison, K.W., "Perceived Authoritarianism in Self and Others by Male College Students and Police Officers", *Journal of Applied Social Psychology*, Vol. 14, 1984, pp. 334-40.
73. Simas, K. and McCarrey, M., "Impact of Recruiter Authoritarianism and Applicant Sex on Evaluation and Selection Decisions in a Recruitment Interview Analogue Study", *Journal of Applied Psychology*, Vol. 64, 1979, pp. 483-91.
74. Johnson, R.C., Johnson, C. and Martin, L., "Authoritarianism, Occupation, and Sex Role Differentiation of Children", *Child Development*, Vol. 32, 1961, pp. 271-6.
75. Blood, R.O. and Wolfe, D.M., *Husbands and Wives: The Dynamics of Married Living*, The Free Press, Glencoe, IL, 1960.
76. Davis, H.L., "Decision Making within the Household", *Journal of Consumer Research*, Vol. 2, March 1976, pp. 241-60.
77. Cronbach, L.J., "Coefficient Alpha and the Internal Structure of Tests", *Psychometrika*, Vol. 16 No. 3, September 1951, pp. 297-334.
78. Anastasi, A., *Psychological Testing*, Macmillan Publishing, New York, NY, 1976, pp. 116-18.
79. Nunnally, J.C. Jr, *Psychometric Theory*, McGraw-Hill, New York, NY, 1967, p. 226.
80. Peter, J.P. and Ryan, M.J., "An Investigation of Perceived Risk at the Brand Level", *Journal of Marketing Research*, Vol. 13, May 1976, pp. 184-8.

81. Engel, J.F., Blackwell, R.D. and Miniard, P.W., *Consumer Behaviour*, 6th edition, Dryden Press, Hinsdale, IL, 1990.

Further Reading

- Allport, G.W. and Ross, J.M., "Personal Religious Orientation and Prejudice", *Journal of Personality and Social Psychology*, Vol. 5, 1967, pp. 432-43.
- Baker, M. and Gorsuch, R., "Trait Anxiety and Intrinsic-Extrinsic Religiousness", *Journal for the Scientific Study of Religion*, Vol. 21, 1982, pp. 119-22.
- Batson, C.D. and Flory, J.D., "Goal-relevant Cognitions Associated with Helping by Individuals High on Intrinsic, End Religion", *Journal for the Scientific Study of Religion*, Vol. 29, 1990, pp. 346-60.
- Batson, C.D. and Ventis, W.L., *The Religious Experience*, Oxford University Press, New York, NY, 1982.
- Masters, K.S., "Of Boons, Banes, Babies, and Bathwater: A Reply to the Kirkpatrick and Hood Discussion of Intrinsic-Extrinsic Religious Orientation", *Journal for the Scientific Study of Religion*, Vol. 30, 1991, pp. 312-17.
- Morris, R.J., Hood, R.W. Jr and Watson, P.J., "A Second Look at Religious Orientation, Social Desirability, and Prejudice", *Bulletin of the Psychonomic Society*, Vol. 27, 1989, pp. 81-4.